sensation. Yet in racial memory this difficulty of conceiving a material basis becomes even greater ; for here the task is to conceive that the single egg-cell can contain the multitude of organized traces or engrams required for the guidance of all the morphogenetic processes as well as those determining all instinctive or innate mental capacities.

I have dwelt at some length on this question of the nature of memory-traces, because it occupies a position of absolutely crucial importance in the whole argument, and nevertheless, or perhaps just for that reason, is squarely faced by very few authors. The immaterial basis of memory and the reality and efficacy of the teleological activities of organisms are the two main supports of any thorough-going non-mechanical biology. And it seems worth while to insist at this point on the intimate relations of these two basic functions. They are the two foundations and essential factors of all mental activities.

The function of mind is to bring past experience to bear, in the form of foresight, for the guidance of present purposive striving. We see evidence of these two aspects of animal activity at every level from the amoeba to the man of genius. For, as Bergson and others have said, there can be little doubt that the man of genius is the man who, in one or another sphere of human activity, brings to bear, in the guidance of his present activities, a richer, fuller volume of racial experience than is accessible to the ordinary man.

Take genius in its cruder manifestations, those of the

calculating prodigies, or those of the musical prodigy who at the age of three or four manifests a degree of facility and an absolute mastery which the average man cannot approximate through long years of laborious training.